

**Commonwealth of Kentucky
Division for Air Quality**

PERMIT APPLICATION SUMMARY FORM

Completed by: Kenvirons, Inc.
Reviewed by: Shreenivas Kesaraju

GENERAL INFORMATION:

Name:	Hydro Aluminum North America, Inc.
Address:	5801 Riverport Road, Henderson, KY, 42420
Date application received:	April 6, 2005
SIC/Source description:	3365/ Aluminum Foundries
Source I.D. #:	021-101-00130
Source A.I. #:	1817
Activity #:	APE20050002
Permit number:	F-06-035

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input type="checkbox"/> Permit modification	<input checked="" type="checkbox"/> Conditional major
__Administrative	<input type="checkbox"/> Title V
__Minor	<input checked="" type="checkbox"/> Synthetic minor
__Significant	<input checked="" type="checkbox"/> Operating
<input checked="" type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input checked="" type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input checked="" type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/>	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☒ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☒ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☐ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Pollutant	Potential To Emit (tpy)	Maximum Permitted Allowable (tpy)
CO	120.0	90
NO _x	55.0	NA
PM	110.0	90
SO ₂	6.51	NA
VOC	97.2	90
Total HAP > 25 tpy	15.4	NA
Single HAP > 10 tpy HCL (CAS 7647-01-0)	9.34	9.0

SOURCE PROCESS DESCRIPTION:

Hydro Aluminum North America, Inc., located in Henderson, Kentucky, is classified as a Secondary Aluminum Production facility. Hydro Aluminum is a remelt plant, where aluminum scrap is recycled into primary aluminum extrusion billets. Purchased scrap is received at the plant and is remelted and processed in natural gas-fired melting, holding, and homogenizing furnaces. The resulting billet products, through alloying and tempering, are designed for specific customer applications.

The Henderson facility is a Secondary Aluminum Production Facility currently operating under Conditional Major Permit No. F-00-013. Hydro Aluminum's application for renewal of the operating permit was received on April 6, 2005. The renewal application was deemed complete on June 5, 2005 (60 days after receipt of application). Applications were previously submitted for the implementation of minor revisions, one on March 8, 2002 and the second on February 24, 2004. The revisions requested in all applications have been incorporated into the permit.

EMISSION AND OPERATING CAPS DESCRIPTION:

The facility has requested that all hourly production and emission limits be removed and that the facility be limited only on an annual basis. Source-wide limits of 90 tons per year for emissions of any single criteria pollutant, 9 tons per year any individual HAP, and 22.5 tons per year combined HAP have been applied to replace individual emission point limits. The exception is specific to the Group 1 furnace (Reverberatory Melting Furnace), the applicable limit is 0.00021 grains of D/F TEQ/ton of charge or feed (per 40 CFR 63.1505(i)(3)). Limits on aluminum production and natural gas usage have been requested of 130,000 tons per year and 1035.7

million cubic feet per year respectively. Also, the facility will charge no greater than 30% painted scrap. Hydro Aluminum also requested an increase in Dross handling and disposal to 6,000 tons per year.

OPERATIONAL FLEXIBILITY:

Hydro Aluminum has requested that a flexible permit be issued without hourly operating or emission limitations. Hydro Aluminum is regulated by annual facility wide operating cap on production levels and work practices. Hourly limitations have been removed from the permit although the facility will be required to maintain records of daily clean charge, alloying material, and compliance with 30% painted scrap rate.